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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/577,132

Applicant(s)

RICHARD, PATRICE

Examiner

SUSAN SU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 25 April 2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 25. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1-10 are objected to because of the following informalities:

In claim 1, the term "in particular" is indefinite; it is suggested that "vacuum bottle, in particular of the Redon type, that" be changed to "vacuum bottle of the Redon type that."

In claims 1 & 3-8, the term “and/or” is held to be indefinite; it is suggested that “and/or” be changed to --or-- wherever it appears in the named claims. The examiner has given the term its broadest interpretation by defining “and/or” to mean “or.”

In claim 2, there is a grammatical error: “comprise” should be changed to --comprises--.

In claims 4 & 5, there is a lack of antecedent basis for the claimed feature “at least one injection.” It is suggested that the term be changed to --said at least one injection--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being obvious over Deverre (U.S. Patent 7,131,958) in view of Seddon et al. (U.S. Patent 6,024,731).

With regard to claim 1, Figure 2 of Deverre teaches a placental-blood extraction device comprising at least one extraction needle (4 or 5) for piercing the vein of the umbilical cord (Col. 2 lines 16-17) or of the placenta, and a collection vessel (1) connected to said at least one needle via at least one tube (2). However, Deverre does not teach that the device is being characterized in that it further comprises suction means connected to said at least one needle and adapted to suck the placental blood so as to feed a said collection vessel, said suction means comprising a vacuum bottle of the Redon type that simultaneously forms a collection vessel. Seddon et al. teaches that the suction means (pre-charged vacuum that is inside the bottle, as disclosed in Col. 5 line 2) adapted to suck the blood or liquids from a wound so as to feed a collection vessel (1), said suction means comprising a vacuum bottle (1) of the Redon type that simultaneously forms

a collection vessel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Deverre with the suction means and vacuum bottle as taught by Seddon et al. for the purpose of increasing and maintaining the speed at which placental blood is collected. After the modification, the suction means will be connected to the at least one extraction needle and the entire device will be adapted for sucking placental blood.

With regard to claim 2, in the modification of claim 1, Seddon et al. also discloses that said suction means further comprises a vacuum pump (col. 1 line 14).

With regard to claim 3, in the modification of claim 1, both Deverre and Seddon et al. also teaches that the device includes at least one injection or extraction site (8 or 12 in Figure 2 of Deverre; the opening that connects 3 to 1 in Figure 1 of Seddon et al. because an opening in the bottle is where injection or extraction can be done) between said at least one extraction needle (4 or 5 in Deverre) and said collection vessel (1 in either Deverre or Seddon et al.).

With regard to claim 4, in the modification of claim 3, Figure 2 of Deverre also teaches that said at least one injection or extraction site (8) is provided on the tube (2).

With regard to claim 5, in the modification of claim 3, Seddon et al. also teaches that said at least one injection or extraction site (opening that connects 3 to 1) is provided on the collection vessel (1).

With regard to claim 6, in the modification of claim 3, Figure 2 of Deverre also teaches that said at least one injection or extraction site (12) is used to inject an anti-coagulant (Col. 3 lines 5-6 & 23-24) or to extract a sample of blood for analysis or to extract the blood contained in said collection vessel.

With regard to claim 7, in the modification of claim 1, Figure 2 of Deverre also teaches that said device includes blood-flow control means (13a or 14a) and Figure 1 of Seddon et al. teaches a suction control means (5 or 6).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being obvious over Deverre (U.S. Patent 7,131,958) in view of Seddon et al. (U.S. Patent 6,024,731) as applied to claim 7 and further in view of Darling, Jr. (U.S. Patent 6,213,986).

The combination of Deverre and Seddon et al. teaches all the limitations of claim 1. The combination of Deverre and Seddon et al. does not teach that the blood-flow control means or suction control means include a knurled adjustment wheel. However, Figures 1-3 of Darling, Jr. teach a fluid-flow control means (10, see Figure 1) that includes a knurled adjustment wheel (110, see figures 2 & 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the fluid-flow control valve as taught by Darling, Jr. into the combination of Deverre and Seddon et al. for the purpose of variably controlling the flow of blood from the placenta into the collection vessel.

8. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being obvious over Deverre (U.S. Patent 7,131,958) in view of Seddon et al. (U.S. Patent 6,024,731) as applied to claim 1 and further in view of Van Der Heiden et al. (U.S. Patent 5,879,318).

With regard to claim 9, in the modification of claim 1, the combination of Deverre and Seddon et al. teaches all the limitations of this claim except for said collection vessel contains an anti-coagulant before receiving said placental blood. Figure 3 of Van Der Heiden et al. teaches that a collection vessel (14) contains an anti-coagulant (15) before receiving said placental blood (Col. 5 lines 18-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add an anti-coagulant into the collection vessel prior to drawing placental blood as taught by Van Der Heiden et al. for the purpose of preserving blood for further use.

With regard to claim 10, in the modification of claim 1, the combination of Deverre and Seddon et al. teaches all the limitations of this claim except for the device is packaged in sterile manner and is assembled in a single package so as to be ready to use once said package has been

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opened. Van Der Heiden et al. teaches that said device is packaged in sterile manner (Col. 6 lines 15-17) and is assembled in a single package so as to be ready to use once said package has been opened (suggested by Col. 6 lines 35-36 because sterility for the entire closed system can be kept only if the system is already closed before the sterilization process and kept sterilized as a connected single system). It would have been obvious to one of ordinary skill in the art at the time the invention was made to sterile-pack the device as taught by Van Der Heiden et al. for the purpose of preventing bacteria from contaminating the placental blood once it has been drawn into the collection vessel.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lauterjung (U.S. Patent 4,376,439) teaches a closure for a suction bottle used in medical purposes.

Dracker (U.S. Patent 5,356,373) teaches a method and apparatus for collecting and storing umbilical blood.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSAN SU whose telephone number is (571)270-3848. The examiner can normally be reached on M-F 8:30AM-6:00PM EST (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long T. Nguyen can be reached on 571-272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Su

/Long Nguyen/
Supervisory Patent Examiner
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